CATS NEWSLETTER

The official journal of the Capital Area Timex/Sinclair Users Group

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PRESIDENTIAL RAMBLINGS

Welcome back from your summer vacations! We look forward to seeing you at the meetings!

- ### Picnic

The third (I think) annual CATS picnic is to be held on September 23, 1989, at the Greenbelt regional park; details and a map are to the right. Come one, come all - be sure to bring the whole family. If you have been to one or more of the previous ones, you know you want to be there again! If you haven't, you don't want to miss it this year! Good food, good fun and good fellowship! By the way, there is only one important rule that must be followed at the picnic, NO DISCUSSION OF COMPUTERS OR RELATED TOPICS! This is to give our computer widows/widowers a break.

- ### Executive Board Meeting

Members of the Executive Board are requested to come to the meeting on the 9th at noon so that we can have an Executive Board meeting before the regular meeting. This will be an important meeting because I would like to discuss our agenda over the next year.

See you at the meeting.

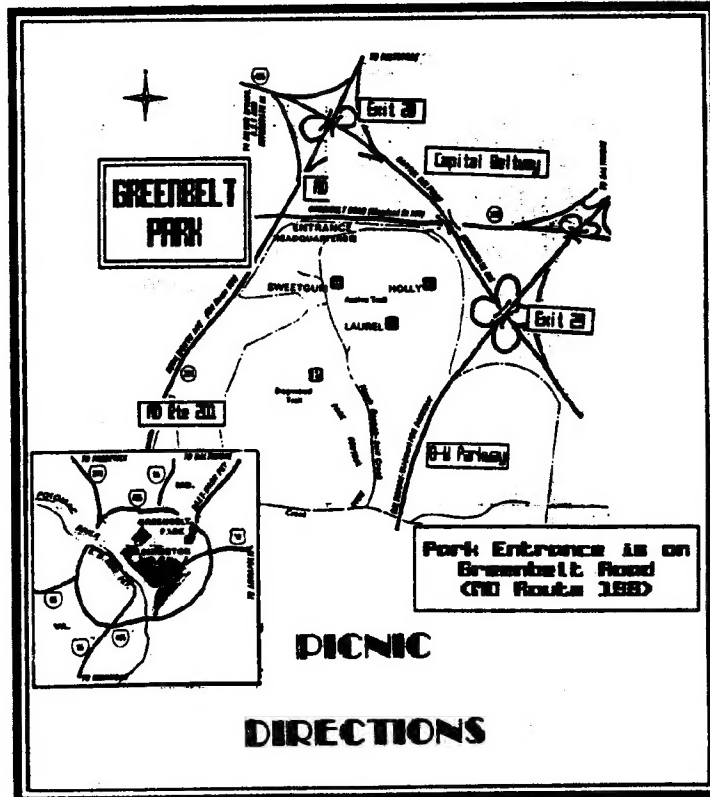Bill

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COME AND GET IT!
CATS' 3rd Annual Picnic in the Park

If you made the picnic last year, or for that matter the year before that too, you know what a good time we had.. The rain even held off until everything was winding down. This year's event should be even better. CATS will be furnishing charcoal, drinks, and chips. You furnish the meat and buns. Bring the wife (or husband), a friend, or kids. Everyone is welcome. See the map for directions. We will be in the Laurel Picnic area. Remember, if you are coming from Washington on the Baltimore-Washington Parkway, Greenbelt Road is right after you cross over

the Capital Beltway. You will then take a right on Greenbelt Road. Festivities start at 11 AM. The funeral pyres will be ignited at Noon and burnt offerings will

commence soon after. DON'T MISS IT!

In This Issue

SEPTEMBER MEETING AGENDA

11:30 **Workshop**-Catchup session on PASCAL Programming-Led by Duane Parker

12:00 **Executive Board meeting**

2:00 **General Meeting**

2:30 **Program:** Further Pascal programming by Duane Parker

4:30 **Adjourn**

KEY DATES

September

9 General Meeting

19 Executive Board-Location to be announced

23 Picnic-Greenbelt Park, Laurel Picnic Area

29 October newsletter *DEAD-LINE*

October

14 General Meeting

FROM THE EDITOR

This has been a strange month. Every time I started to tackle anything computer related, something else came along with a higher priority. All of a sudden it was the 25th and time to put together another newsletter. Well, here it is and I hope you like it.

● **Gourmets take note**

Before I forget it, don't YOU forget our third Annual Picnic in the Park. It will be held on Saturday, September 23, at the Laurel Picnic Area in Greenbelt Park. Elsewhere in this issue you will find a map. This year we will be looking forward to weather more like we had two years ago rather than what we experienced last year. No matter what, I predict that you will enjoy yourself. This is the one day a year when you can't talk "computer". For some of us that will definitely be a drag—but that's the way it is.

● **Duane Parker-"Mr. Pascal"**

For the third time this year, Duane Parker is furnishing the program. In reality, it is really the continuation of his previous two tutorials on Pascal, both of them received rave reviews so, in the tradition of Hollywood, we give you "Pascal-Part 3". The title is not quite as imaginative as "Friday the 13th-Part 8", but it will have to do. See Duane's comments elsewhere about what you should bring to the meeting, as the listing has been slightly changed. For those that weren't able to attend the prior sessions, don't despair. Come to the 11:30 AM session which has been designed as a review to get you up to speed.

● **Software slowdown?**

Has anyone out there seen anything on the horizon that even faintly resembles a new QL program. I know I haven't. Pehaps this is a good time to try and pick our favorites and/or those we thought were the biggest bombs. As an incentive to get more entries, I will give a prize, the new DTP Professional, to the entry which I deem the best. So unlimber your typing fingers and pick the one you liked

best or pan the one that gave you the most fits. The choice is yours. The only ground rule is that the submission must be on a disk or microdrive cartridge to be considered.

● **Try it, you'll like it**

Have you tried our BBS? If you haven't, and, from the looks of things, there are a lot of folks who fit in that category, please do. One thing that might be holding some of you back is the lack of a modem. Why doesn't someone get a group buy going for those little jewels. 1200 baud modems go for around $85, but with a buy of 5 or 10 you probably could get them for $80. Who's going to get off the stick and do it? Let me know and I'll help you write it up for the newsletter.

● **What's inside**

If this were a wine cellar, I would say that we were laying down a " monster crop" as I feel that the material in this issue will only improve with age. Mark Fisher looks at the Fido network, Hank Dickson looks back at Herb Schaaf's presentation at the last meeting and then introduces Duane Parker's program for this meeting. Finally, Duane Parker has some notes about his upcoming presentation and a few short articles about various Pascal subjects. This looks like it is going to be one of the classic issues!

Submissions to the newsletter should conform to the following criteria: If hard copy is submitted, it must be no wider that 2 3/8" in width. Hard copy is the preferred media for TS 1000 and 2068 based articles. QL users can submit microdrive cartridges or floppy disks. NO HARD COPY. If possible, though, use the BBS. (301) 588-0579. Send to:

CATS

P.O. Box 467

Fairfax Station, VA 22039

CATS Carries On with PASCAL: Whole Day Devoted to New Compiler

DUANE PARKER, resident CATS expert on PASCAL for the QL, has an all-day workshop planned for members on Saturday, September 9.

The best part is that it's a day loaded with hands-on, inter-active use of a new PASCAL compiler for the QL, an item about which Duane is highly enthusiastic. Plus the day's activities are structured to permit all interested members to take advantage of QL networking, PASCAL programing, and Duane's excellent teaching abilities.

The timetable looks like this:

11:00 — CATCHUP session on QL networks. Review of the PASCAL language. Practice exercises.

1:00 — Break.

2:00 — CATS business meeting.

2:30 — Continuing the QL QUEST: Analyzing residual software problems. Working with the new EPROM-less QL compiler. Timing experiments. Programing exercises.

For those who would like to be a part of this experimental/educational network on Saturday, Duane has provided the following checklist:

TOOLKIT, Tony Tebbe's package, preferably on a Trump card. (NOTE: An EPROM with the old QL PASCAL will NOT be needed this time). QL's, monitors, and some formatted mdv cartridges (or floppy disks). Network interface cables (have miniature male plugs, like Sinclair MIC/EAR cables, only the cables are 10-feet long). Extension cords or power strips; all-purpose tape. Small reading lamp so keyboard can be used when slides are projected.

Those interested in either the CATCHUP or QUEST sessions are encouraged to read Duane's article in the June, 1989 issue of the CATS newsletter.

The goal is to have a QL station set up for every two-to-three participants. Duane will provide a QL station and floppy disk drive, which will be the network's file server. He has software to activate the network and keep it humming. So don't miss out on this QUEST: bring your equipment Saturday and get connected!

GIVE THE PATRONS A BREAK!

Its September and the advent of a new season, the New Carrollton Branch Library will commence another busy season.

On the weekends, it is always hard to find space in the Library's prking lot. With 25 to 50 CATS members—all in their own cars—also competing for space on Saturdays, the situation bcomes almost hopeless for regular patrons.

We would suggest that CATS members utilize alternative parking wherever possible, such as:

On-street parking on Lamont Street and its tributaries; or The parking lot at the Margaret Brent Special Center, a school building accessible from Lamont street which puts one within 25 feet of the Library parking lot.

With some sensible help, we can all find a satisfactory place to park until funds become available for additional paving (probably in the next century).

FRIENDS OF NEW CARROLLTON LIBRARY

HERB SCHAAF PROVIDES CATS MEMBERS A PERS-PECTIVE ON THE COM-PUTER SCENE

HERB SCHAAF, a long-time CATS member who commutes regularly from Wilmington, Delaware, provided the membership with some well-prepared remarks at the August, 1989 meeting, remarks which were at once historical, entertaining, and thought-provoking.

Herb, who is with the library at the University of Delaware, began with a lexicographer's approach to his topic, "Uses of Computers".

Lexicography, or the study of the meaning of words, led him through many dictionaries looking for the meanings of the words "uses" and "computers". He found the grandaddy of all dictionaries (Oxford English Language) has many columns on the derivation of "uses", but practically nothing on "computers". When you look at a modern, specialized technical dictionary, however, the situation is reversed.

The classic definition of a computer says it has four elements: Some form of sensing input Some form of memory or storage Some sort of processing Some kind of output

Of course, humans seem to have all of these. Plus something else: JUDGE-MENT.

Also, humans can please, annoy, challenge, serve, control, and more. So can computers!

The word "use" has been around longer than written English. It permeates much of the language, e.g.: amUSE; bemUSE; confUSE; defUSE; effUSE; fUSE; hoUSE:infUSE; excUSE; reclUSE; mUSE; mUSEum; rUSE; perUSE; zUSE; abUSE; accUSE; diffUSE; refUSE; disUSE; unUSEd; misUSE; fUSEd; suffUSE; transfUSE; caUSE; claUSE; applaUSE; doUSE; moUSE; loUSE; hoUSE; roUSE; yoUSE; soUSE!

What about zUSE, you ask? That was CONRAD ZUSE, the aeronautical engineer in pre-WW-II Germany who was probably the first inventor of the digital electronic computer, put who couldn't get his application to the US Patent Office in a timely manner because there was a war on.

The library also yields software catalogs such as "Elsevier" and "Software Reviews on File". Each has its own method of categorizing the work computers do. All are growing rapidly in terms of microcomputers, while separate catalogs for mini's and mainframes are fat and stable.

FIDO—If it won't sit up and beg, what can it do?
by Mark Fisher

Notes From Across the Country: The Sinclair Network

There's a wide-flung network of Independent computer users stretching across the country. I'm talking about the confederation known as FIDO net. I'm not an expert on FIDO net - far from it! In fact, I knew that it offered a way to get messages across the country overnight for 25 cents, but I still haven't seen it working first-hand. In fact, I'm sure that most readers of this newsletter have heard of it, but haven't gotten to know what exactly it is, or how it works.
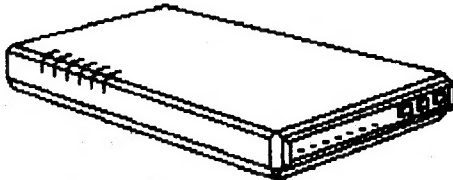
First a little background: FIDO net is a transcontinental association of INDEPENDENT sysops, utilizing a common message packet protocol. Messages posted at any given FIDO node automatically thread their way across the country, node to node, until they reach their destination. This is a telephone based system, not radio, but the principle is similar to packet radio. Each sysop controls one node, and yeilds to no one the right to decide what passes through. "Echo's" ripple through the system, covering various special interests. With a local phone call, you can browse messages left from across the country.

Pete Fisher, of Arizona, phoned to tell us about the Sinclair part. It seems that among the thousands of FIDO sysops, one chose to start a "Sinclair Echo". This is a dedicated message base for T/S owners. It's active, with 20-30 substantial messages a DAY (they're all connected to local nodes - no long distance!).

Ah yes, the catch. Above, I referred to the FIDO net as a confederation; well, they more resemble the OAS than the CSA. If an individual sysop chooses NOT to relay the "Sinclair Echo" on towards us, we'll never see it. The network is aggresively non-centralized -the only way we can insure our chance to see the "Sinclair Echo" is to find a friendly FIDO sysop, and get him to setup automatic download of echo #908. If he can't find it listed on his list, have him contact Mike Fuchs, Net 1 Node 201, for the most recent list.

Pete is forewarding a printout of one day's messages- perhaps Vernon will run them in a future newsletter. In the meantime, check out the local FIDO BBS numbers (you'll find them in the BBS list mentioned on OUR BBS), and start applying pressure! With one of the largest Sinclair-based clubs in the country, we ought to be able to get access to the "Sinclair Echo!" (Editor's note: The FIDO numbers are also listed on the back page under "Networks".)

SPEED! HOW FAST IS QL SOFTWARE? by Duane Parker

Sometimes the QL is fast: the "EDITOR" does many things that we want in wordprocessing done fast. Sometimes the QL is slow: just import something into a QUILL document - coffee break time! The software is different.

Since I now have three different ways I can write-up some programs, QL Pascal, Computer One Pascal, Forth, and SUPERBASIC, I decided to see what the difference might be. I wrote short programs in each of these languages to calculate prime numbers less that 32767, the maximum integer that SUPERBASIC can handle. Each of the programs calculated all the primes less than the max. down to a limit as input by the user. Each then prints the primes to the screen, and when finished, prints the run-time. Furthermore, each program was similarly constructed, MOD statements were used, similar IF/THEN controls were used, etc.

Here are the results for a calculation of primes from 29000 to 32767:

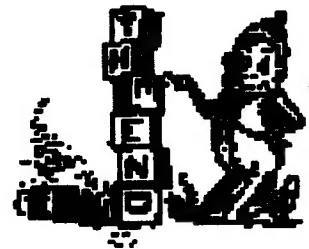| Language	Run-time, seconds
Forth79 (Quanta lib.)	23
QL Pascal (Metacomco)	27
Computer One Pascal	67
SUPERBASIC (intepreter)	245

I still need to compile the BASIC program, but I have not gotten into that yet.

The source code for these programs are available and may be published in the newletter if our esteemed Editor deems to do so. The Pascal compiled code may also be obtained from the author (Come to the CATS meeting).

Editorial-Continued from Page 2

- **The last word**

The inclusion of Dick Parker's article on utilities in the last issue was an experiment. I feel that there is a mother lode just waiting to be mined, right in our own newsletter. Over the years, we have published a wealth of information on the Sinclair family of computers. Are you interested in seeing some of it again? I welcome your comments. Perhaps some of the newer members have some thoughts on this. If you have a particular favorite, let me know and I'll try to get it in. Those of you that have written things in the past and still have the article in your files, don't write over it. Save it. You can never tell, the next time your phone rings, it may be your trusty editor "dialing for golden oldies"!

PASCAL NOTES

by Duane Parker

Since I expect that the CATS membership may be interested in the network setup for the Pascal workshop that we had in June and continued in August, I will mention a few pertinent items here. At a later date, I may be able to write an article on the ins and outs of QL networking (I still need to fill in some holes in how Tebby's commands work).

At the meeting we had seven QL's involved and the presentation part of the networking worked fine! First, 2X2 slides (photographed from an RGB monitor) were projected on the screen, and each of the first three slides were also presented on each screen in the network by using the broadcast feature of QDOS/FSERVE. Then, after some more explanation, and more projected slides, we went through some Pascal programming excercises. Each station ew'd the "screen editor" from n1_flp1_. and then loaded the source code from flp2_num_<filename> (num equalled the station number, TWO, THREE, etc.). To assist the users the <filename> was messaged into a scr at the top of each monitor. This scr was above the Pascal program screens so it was visible to the programmer. The programmer then edited the code, saved it to his directory on flp2_, and later compiled his effort, and linked and ran it. All of this was accomplished with SUPERBASIC programs that made most of the operation transparent to the users.

The Pascal compiler used required a ROM in the QL for it to work. Since effective networking also requires the TOOLKIT in ROM somewhere, this meant each QL that was to use the compiler needed both. The only QL's that we have with such capability are ones with TRUMP cards.

We managed to make this network work - but it did not go quite as I hoped. The parts of SUPERBASIC programs below show how it worked. Below that is the discussion of the problems, which were not extreme. Check with the TOOLKIT manual: Quantum Levels, 6/88; and QL World, 7/89, pp. 22-25 for a full understanding of the comments in the programs below.

OK, here are the Superbasic programs that set-up the network.

First, the station boot program (one for each network station on an mdv):

```
90 MODE 8:clr
100 AT 1,1:PRINT 'Booting'
105 TK2_EXT
110 station$="THREE_":nr=3:[REM this
defines the net no., 2, 3, etc.]
120 initialize nr[REM see the DEF
PROC initialize.]
220 AT #2, 5,5:PRINT #2,'This is net
no.: ';nr
250 clr:[REM clr blanks the whole screen]
260 LRUN neti_0_20: [This is the
broadcasting command. This TK2
command sets up the station to receive a
broadcast. At this point the QL just sits
and waits, no cursor, just waits. In this
case a program was broadcast from
n1_flp1_. and as soon as that happened
the program ran on each station. The
program displayed the desired slide. The
"_20" is needed to prevent neti_ from
robbing all of the QL's memory for the
buffer.]
270 STOP
280 :
290 DEFine PROCedure clr
300 OPEN #9,con_512x256a0x0
310 CLS #9:CLOSE #9
320 END DEFine clr
640 :
650 DEFine PROCedure initial-
ize(nr)[REM PROC. to define this
workstation.
660 NET nr
670 FSERVE
680 NFS_USE
'flp','n1_flp1_','n1_flp2_'&station$
690 clr
700 WINDOW 345,230,144,8:PAPER
1:STRIP 1
710 END DEFine initialize
720 :
```

The boot/utility program on n1_, the fileserver, should explain the rest of the operation.

```
100 CSIZE #2,2,1:PRINT #2,"PAS-
CAL"\"PROGRAM"\"DISK"\"BOOT-
ING" : CSIZE #2,0,0
110 TK2_EXT
120 NET 1
130 FSERVE
140 keys:[REM A proc. to set up some
ALT keys for the slides.]
145 DIM excer$(7,60)
147 setnm:[REM See line 890.]
148 STOP
160 clr:PRINT 'Ready!'
720 :
730 DEFine PROCedure clr
740 OPEN #9, con_512x256a0x0
750 CLS #9: CLOSE #9
760 END DEFine clr
770 :
780 DEFine PROCedure keys:[REM This
is what does the broadcasting. Each slide
program will run on any station the is
waiting with "neti_0_20"]
790 ALTKEY '1','copy flp1_slide1 to
neto_0',"
800 ALTKEY '2','copy flp1_slide2 to
neto_0',"
810 ALTKEY '3','copy flp1_slide3 to
neto_0',"
820 ALTKEY '4','copy flp1_end to
neto_0',"
830 END DEFine keys
```

880:

890 DEFine PROCedure setnm:[REM
This sets up a list of messages to be sent
to guide the user.]

900 RESTORE 940

910 FOR i=1 TO 7:READ excer$(i)

940 DATA
'n1_flp2_num_grid_pas','n1_flp2_num_var-
grid_pas','n1_flp2_num_turn1_pas','n1_flp2
_num_turn2_pas'

950 DATA 'n1_flp2_num_ticar-
ray1_pas','n1_flp2_num_gets-
quare_pas','n1_-flp2_num_tictac_pas'

960 END DEFine sctnm

970 [REM Below, "pg", is the messaging
procedure. It sends a short message to
each station. I needed to set this up for
only those stations that were attached.
Line 1070 was edited to indicate the
stations attached. Look at loop in 990, if
z was replaced by i -1and- if, say station
3, was out. The messaging would stop, a
"Network aborted" message would
appear on n1_. and stations 4-7 would
get no message. I could not find a way to
trap, with WHEN/ERROR, the "Network
aborted" "error", so that the loop would
continue.]

980 DEFine PROCedure pg(k)

985 RESTORE 1070

990 FOR i=2 TO 7:REM the limit would
have to be increased for more QL's.

1000 READ z

1010 IF z > 0 THEN

1020 OPEN
#7,'n'&z&'_scr_300x10a100x0'

1025 PRINT #7,' '

1030 PRINT #7,excer$(k)

1040 CLOSE #7

1050 END IF

1060 END FOR i

1070 DATA 2,3,0,0,0,0:[REM Defines
only stations 2 & 3, as shown.]

1080 END DEFine pg

1090 :

A slide program would be as follows:

100 REMark Program to make slides for
Pascal talk.

110 MODE 8

120 WINDOW 345,230,144,8:PAPER
1:STRIP 1

125 clr

130 slide1:[REM This prints the display to
the screen.]

140 LRUN neti_0_20:[REM This
command sets up the QL to receive the
next item broadcast, and will prevent any
keyboard input until it is received.]]

1000 REM DEFine PROCedure clr is the
same as other programs.

1070 :

1080 DEFine PROCedure slide1

1085 CLS

1090 AT 1,10:INK 7:CSIZE 2,1

1100 PRINT "Pascal"\" A Computer
Programming"\" Language"\\

1110 CSIZE 0,0:INK 3:PRINT ' ':REM
In this sample, only two print lines are
shown.

1200 END DEFine slide1

1210 :

Note line 140, this command sets the QL
to receive the broadcast, that is, it catches
the next slide. Finally, an "end" program
(i. e., "LOAD mdv1_boot") returned the
station to the user by loading, but not
running, the boot program. Two problems
developed. First, the NFS_USE command
did not work as written in the "initialize"
PROCEDURE in the station boot
program (line 680) when the TRUMP
cards were attached. The QL accepted
the command, but the device accesses are
not redirected as NFS_USE. We did some
more checking of this problem at the
August meeting workshop and our
checking confirmed that the TRUMP card
is somehow the problem: the command
did work between two machines -1not-
equipped with TRUMP cards. According
to the QL World article, the usual use of
NFS_USE -1does work- with the
TRUMP card, that is:
"NFS_USE,flp,n1_flp1_,n1_flp2_THREE_"
should make any reference to flp1_ to

look to "n1_flp1_" and any reference to
flp2_ look to the directory

"n1_flp2_THREE_". Our problem may be
that a TRUMP card must be on the
file-server machine - we need to try that
in September.

The second problem was caused by first.
We had to use full file-names for loading
the sample exercises into the Pascal
screen editor, e. g.: "n1_flp2_THREE_var-
grid_pas" Because the Pascal editor,
compiler, & linker allow file names of
only 22 characters, I had to quickly
shorten the excercise names "on-the-fly".

I made changes to these boot programs to
correct some of the problems and used
them at the August workshop. For the
next worshop I plan to use Computer
One Pascal - this will make things easier
yet.

In his own experience, Herb noted his
ZX-81 started him off with 16 error
codes. The 2068 had 27 error codes,
while the QL came in with 99 for its
bundled software family. Who says
there's no progress?

Herb finished with a discussion of the
delightful surprises awaiting visitors to
the Computer Museum located on the
Boston waterfront. From Herb's animated
description, this is something CATS
enthusiasts should positively plan to see
whenever they are even vaguely near
Boston!

LET'S WORK THE NET

by Duane Parker

We have set up QL networks at the
June and August meetings and from
these we have learned a few things,
namely:

1) If the Toolkit is on ROM in all the
QL's in the net the network is easily set
up. All QLs can be connected with the
simple, miniature phone-plug-equipped
cable, and a full loop is allowed (we even
had a "dead" QL in the loop and signal
still got through). After power-up and
TK2_EXT start, command NET n (n =

THE CLASSIFIEDS

ADVERTISING INFORMATION: CATS will run one free 1/4 page "commercial" ad per one year full ($18) membership. Noncommercial ads may be submitted any time. Publication dates for both types will be determined by the Newsletter Editor.

ADVERTISING RATES: Full page, $25; 1/2 page, $15; 1/4 page, $10; 2" X 2 1/2", $7

The Capital Area Timex/Sinclair Users Group

is a not-for-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

Executive Board

President   Bill Barnhart
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Vacant
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CATS maintains a gratis exchange of news-letters with approximately 30 Users Groups across the U.S. and Canada. Groups not sending a newsletter to us for six months are automatically taken off the list.
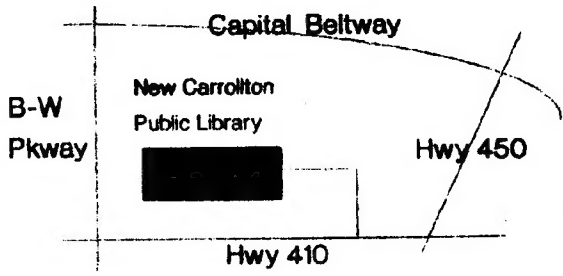
Meetings

Meetings are held from 11:00 AM to 4:30 PM, on the second Saturday of each month, at the New Carrollton Public Library.

Memberships and Newsletters

Memberships cost $18 per family, are good for 12 months, and include all privileges (newsletter, access to libraries, group buys, etc.). A Newsletter Only subscription is available for persons living outside the Washington Metro area and is $12 per year.

Networks

Timex SIG on Compuserve: Wednesday night, 10:00 PM Eastern time (GO CLUB).

OZX BBS: (505) 522-7081 FIDO net 15, node 6. East Coast dial (703) 547-4815 FIDO net 18, node 9.

CATS BBS: (301) 588-0579, 8-N-1, 300 baud only. News and general information, 24 hours a day.

Capital Beltway

B-W Pkway

New Carrollton Public Library

Hwy 450

Hwy 410

The next meeting of CATS will be held on:

Saturday, September 9, 1989   11:00 AM   Pascal Workshop
2:00 PM   General Meeting

At: New Carrollton Public Library 7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS. THIS IS THE ONLY ISSUE YOU WILL RECEIVE